

# RWE

# Staythorpe Power Station Carbon Capture Project

Community Update - February 2026



## Project Update

Since our last update, we've progressed our proposals for carbon capture technology at Staythorpe. In 2025, we completed further flooding, cooling and archaeology assessments and conducted further design work. We also carried out our non-statutory consultation to help identify early feedback from the local community before we progressed our design.

We are submitting proposals to retrofit the power station with carbon capture technology to provide approximately 1.5GWe of decarbonised electricity. That is enough to power around 3.3 million homes. This will allow a high percentage of the carbon dioxide emitted by the power station to be captured and stored safely, making a significant contribution to the UK's net zero commitments and energy security.

The Staythorpe Power Station Carbon Capture Project will connect into a carbon dioxide transportation pipeline, which will transfer the captured carbon dioxide to offshore storage facilities beneath the North Sea – it is expected that this pipeline will be part of the Viking CCS, led by Harbour Energy.

Planning consent for the proposed carbon capture plant is being sought via a variation to the existing Section 36 consent. The variation is being sought under Section 36C of the Electricity Act 1989. The variation application will be assessed by the Department for Energy Security and Net Zero (DESNZ) who will determine whether consent should be granted. We expect to submit our variation in February this year.

### Benefits of the carbon capture facility



#### 1.5GWe

1.5GWe of decarbonised, secure, flexible energy – enough to power around 3.3 million homes.



#### Up to 3.7Mt/year

Up to 3.7Mt/year of CO<sub>2</sub> captured, the equivalent of removing 740,000 petrol cars from the road.



#### 100+ jobs

Support over 100 high-quality, long-term operational jobs and hundreds of additional jobs during construction.

## Community Consultation

Between **Tuesday 4 February and Tuesday 18 March 2025**, we asked for your feedback on our proposals as part of our non-statutory consultation. Here's a quick snapshot look at our consultation:

- **6,580** newsletters sent to addresses closest to Staythorpe Power Station
- **111** attendees across our two in-person consultation events in Averham & Farndon
- **382** page views to our project website during the consultation period
- **32** feedback responses received

From the feedback we received we understood that these were your key areas of interest:



#### Impacts to flooding



#### Traffic and access during construction



#### Noise and vibration impacts



#### The need for decarbonisation



#### Visual impacts



#### Changes in air quality



#### Biodiversity improvements



#### Jobs and economic benefits

We would like to thank everyone who attended our in-person events and online webinars. Since then, we reviewed your feedback, which, where appropriate, helped to inform our plans for our Section 36 Variation application to DESNZ.

Once the application is made, the final Section 36 Variation will be published on our website in spring 2026.

## What's been happening on site?

### Archaeological Surveys

Over the summer, we examined four fields west of Staythorpe Power Station to look for signs of past human activity. To do this, we removed the top layers of soil, dug trial pits and then carefully investigated what lay beneath. Archaeologists photographed and recorded any features they found before filling the trenches back in. The dig revealed remains from several periods: prehistoric, Roman, and Post-Medieval to Modern.

From the prehistoric period, we found five flint tools that were probably made during the Neolithic era. Roman evidence included two ditches containing pottery and cereal grains. These ditches were part of a large enclosure that had previously been seen as crop marks. From the Post-Medieval to Modern period, we uncovered old field boundary ditches shown on historic Ordnance Survey maps. These boundaries were later removed to make the fields larger.

Overall, these findings match what is already known about how land was used and settled in the Trent Valley over time.

### Cooling Options

When we undertook our non-statutory consultation in early 2025, we were exploring two different carbon capture plant cooling options as part of our proposals: dry air cooling and evaporative cooling. Based on environmental, technical and commercial reasons, dry air cooling will be pursued as the basis of design for the final planning application.

### Ecology Enhancement

We have continued to carry out ecology surveys across the Staythorpe Power Station site over the summer months and have developed a Habitat Monitoring and Management Plan. This plan sets out the strategy for how particular habitats may be retained, restored and enhanced as part of the proposed development and has been developed in consultation with the local authority. The full details of which habitats will be enhanced by the proposed development will be determined during the detailed design phase when the plan will be updated and agreed with the local authority.

### Flooding Assessment

A Flood Risk Assessment (FRA) and Outline Drainage Strategy has been produced to support the application. The FRA checks the risk of flooding before and after the development from all sources (rivers, sea, rain, groundwater, sewers, and man-made systems) for as long as the development is in use. It considers river levels, peak water flow, heavy rainfall, and the effects of climate change.

The assessments demonstrate that the development will not give rise to a significant increase in off-site flood risk, a conclusion that has been reviewed and concurred with by the Environment Agency. Any changes to the development that would affect flood risk need to be agreed with the local authority and the Environment Agency.





## Power Station News - RWE opens state-of-the-art Fleet Control Room

RWE has opened a new UK Fleet Control Room at Staythorpe Power Station, a major step in modernising and future-proofing its gas generation fleet. Equipped with advanced operational technologies, the facility will provide remote support for four CCGT sites – Little Barford, King’s Lynn, Great Yarmouth and Didcot – alongside Staythorpe, the UK’s second-largest CCGT.

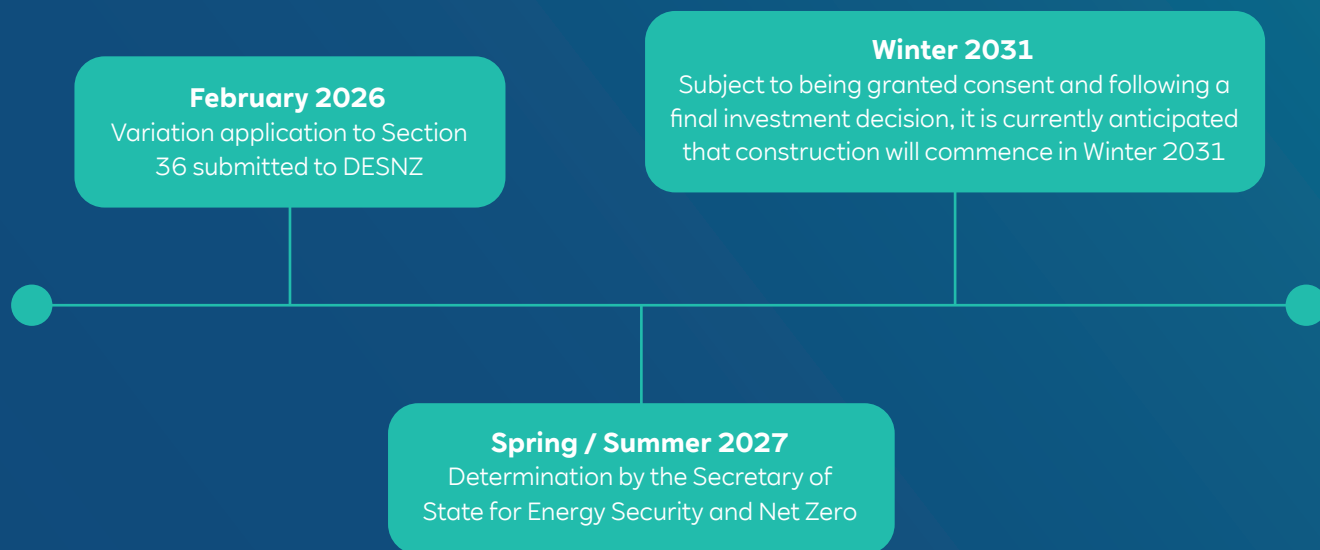
Nikolaus Valerius, CEO of RWE Generation, said: “This marks the next stage in our digital transformation, making our gas fleet smarter and more flexible. Gas remains a vital transition technology, enabling more renewables while ensuring reliable power.”

The control room features cutting-edge hardware and software, real-time data capabilities, and the latest Human Machine Interface design. It allows Staythorpe staff to manage output, start-ups and shut-downs across all five sites, improving efficiency, reducing duplication, and enabling teams to maximise their expertise.



## Next steps

We are now in the process of finalising our assessments and designs to support the variation application. Below is a high level indication of timings and next steps for the project:



## Contact us:

If you have any questions our dedicated team is here to assist you. You can reach us via:

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